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Patent claims

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1. Adjustable pedal assembly (20), in particular for use in a motor vehicle, comprising:

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a. a subpedal (1), which is pivotably mounted at the motor vehicle;

b. a pedal (4), which is slideably arranged at the subpedal (1) by a first slide link (6, 7);

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c. at least one positioning element (8), which is pivotably mounted at the subpedal (1) and slideably mounted at the pedal (4) by a second slide link (10, 12), so that

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d. the pedal (4) glides relatively to the subpedal (1) during a pivoting of the positioning element (8) effected by means of an actuator acting on the positioning element (8) or on the pedal (4), characterized in that

e. the positioning element (8) is additionally mounted at the pedal (4) by a third slide link (11, 13) separate from the second slide link (10, 12).

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2. Adjustable pedal assembly in accordance with claim 1, wherein the positioning element (8) consists only of a single element, which is mounted at the pedal (4) by said two separate slide links (10, 12; 11, 13).

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3. Adjustable pedal assembly in accordance with one of the claims 1 or 2, wherein the subpedal (1) comprises a first elongated guide (7) and wherein the pedal (4) is slideably supported within this first elongated guide (7) by a link, so that the pedal (4) is adjustable substantially in parallel to the vehicle's longitudinal axis.
4. Adjustable pedal assembly in accordance with one of claims 1 to 3, wherein the pedal (4) comprises a second (12) and a third (13) elongated guide.
5. Adjustable pedal assembly in accordance to claim 4, wherein the paths of the first, second and third elongated guides (7, 12, 13) are arranged such that when a force is applied to a foot-piece (14) of the pedal (4) to operate it, a locking in relative movement of the subpedal (1), the pedal (4) and the positioning element (8) to each other is produced.
6. Adjustable pedal assembly in accordance with one of the claims 4 or 5, wherein the paths of the three elongated guides (7, 12, 13) are arranged, so that the foot-piece (14) of the pedal (4) follows a predetermined trajectory during the adjustment of the pedal (4).
7. Adjustable pedal assembly in accordance with one of claims 4 - 6, wherein the pedal (4) comprises a first pin (6), engaging the first elongated guide (7), wherein the positioning element (8) comprises a second pin (10), engaging the second elongated guide (12), and wherein the positioning element (8) comprises a third pin (11), engaging the third elongated guide (13), wherein said pins (6, 10, 11) and said elongated guides (7, 12, 13) constitute said first, second and third slide links (6, 7; 10, 12; 11, 13).
8. Adjustable pedal assembly in accordance with one of claims 4 - 7, wherein the paths of the elongated guides (7, 12, 13) are substantially in parallel to a plane defined by the vehicle's longitudinal axis and the vehicle's vertical axis.

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9. Adjustable pedal assembly in accordance with one of claims 3 - 8, wherein the path of the first elongated guide (7) is substantially straight.
- 5 10. Adjustable pedal assembly in accordance with one of claims 4 - 9, wherein the paths of the second (12) and the third (13) elongated guide are curved.
11. Adjustable pedal assembly in accordance with one of claims 3 - 10, wherein the path of the first elongated guide (7) is arranged substantially horizontal
10 when the pedal (4) is not actuated.
12. Adjustable pedal assembly in accordance with one of claims 1 - 11, wherein the positioning element (8) is pivotable around an axis (9), which is substantially in parallel to the vehicle's transverse axis.
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13. Adjustable pedal assembly in accordance with one of claims 1 - 12, wherein the rotation point (9) of the positioning element (8) is located below the rotation point (3) of the subpedal (1).
- 20 14. Adjustable pedal assembly in accordance with claim 13, wherein the path of the first elongated guide (7) is directed between the rotation point (3) of the subpedal (1) and the rotation point (9) of the positioning element (9).
- 25 15. Adjustable pedal assembly in accordance with one of claims 1 - 12, wherein the rotation point (9) of the positioning element (8) is located above the rotation point (3) of the subpedal (1).
- 30 16. Adjustable pedal assembly in accordance with claim 15, wherein the path of the first elongated guide (7) runs above the rotation point (3) of the subpedal (1).

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17. Adjustable pedal assembly in accordance with one of claims 4 - 16, wherein the sub-pedal (1) comprises two external parallel walls, which are mechanically connected, wherein the at least one positioning element (8) and the pedal (4) are mounted in-between the two walls by means of the elongated guides (7, 12, 13) and the corresponding pins (6, 10, 11).
18. Adjustable pedal assembly in accordance with one of claims 1 - 17, wherein said at least one positioning element (8) comprises a V-shaped plate, which is pivotably mounted at the vertex of the V-shaped plate and wherein said second and third pins (10, 11) are arranged at the arms of the V-shaped plate.
19. Adjustable pedal assembly in accordance with one of claims 1 - 18, wherein said actuator acting on the positioning element (8) or the pedal (4) is driven by an electric motor.
20. Adjustable pedal assembly in accordance with one of claims 1 - 18, wherein said actuator acting on the positioning element (8) or the pedal (4) is manually driven.
21. Adjustable pedal assembly in accordance with one of claims 19 or 20, wherein said actuator acting on the positioning element (8) or the pedal (4) is driven either by means of a toothed wheel gearing, a spindle gearing, a cam gearing, a chain drive, a belt drive, or a V-belt drive, a flexible shaft, or by a combination of said gearings.
22. A pedal unit comprising at least two of the pedal assemblies in accordance with one of claims 19 - 21, wherein the at least two of the pedal assemblies (20) are grouped together such that the positioning elements (8) or the pedals (4) of the pedal assemblies (20) are jointly driven for a joint adjustment.

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23. A pedal unit in accordance with claim 22, wherein only a single common adjustment means is used for adjustment.